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(12) **United States Patent**
Binder

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(54) **SEQUENTIALLY OPERATED MODULES**

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(57) **ABSTRACT**

Method, modules and a system formed by connecting the modules for controlling payloads are disclosed. An activation signal is propagated in the system from a module to the modules connected to it. Upon receiving an activation signal, the module (after a pre-set or random delay) activates a payload associated with it, and transmits the activation signal (after another pre-set or random delay) to one or more modules connected to it. The system is initiated by a master module including a user activated switch producing the activation signal. The activation signal can be propagated in the system in one direction from the master to the last module, or carried bi-directionally allowing two way propagation, using a module which revert the direction of the activation signal propagation direction. A module may be individually powered by an internal power source such as a battery, or connected to external power source such as AC power. The system may use remote powering wherein few or all of the modules are powered from the same power source connected to the system in a single point. The power may be carried over dedicated wires or concurrently with the conductors carrying the activation signal. The payload may be a visual or an audible signaling device, and can be integrated within a module or external to it. The payload may be powered by a module or using a dedicated power source, and can involve randomness associated with its activation such as the delay, payload control or payload activation.

28 Claims, 156 Drawing Sheets